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Nutrition of patients with pollinosis in the flowering period

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Abstract
This article is devoted to the actual problem of diet prescribing in patients with pollinosis during the flowering period. Pollinosis is an urgent problem of modern therapy. Pollinosis is a pathological condition that occurs during the flowering period of plants and is characterized by the manifestation of signs of allergy. The people the disease was called "hay fever." Recently, the frequency of cases of hay fever has increased, due to poor ecology, low immunity, malnutrition and lack of vitamins and minerals. In patients with pollinosis during the flowering period, the quality of life deteriorates sharply. Patients complain of nasal congestion, frequent sneezing, itchy eyes, swelling of the eyelids, lack of smell, disturbed sleep, headaches. This symptomatology accompanies the patient during the entire pollination of the plant for 2-3 months Diet is a necessary condition for treatment and improvement of the patient's quality of life. The purpose of the study: to study the effectiveness of treatment of pollinosis with and without a Hypo-allergenic diet. Materials and methods: 40 patients with symptoms of pollinosis aged from 20 to 40 years were examined. All of them had symptoms of pollinosis registered in may and June, and all of them had sensitization to birch. All patients were prescribed symptomatic and pathogenetic treatment: inhaled glucocorticosteroids nasonex 1 time per day, mast cell membrane stabilizer-singlon 10mg 1 tablet per day for the period of birch flowering. In addition to treatment, patients in the study group were prescribed a Hypo-allergenic diet with the exception of stone fruits, honey and carrots. Stone fruits (apples, pears, plums, apricots, peaches, cherries, cherries, etc.), honey and carrots have cross sensitization to birch allergens. Accordingly, in addition to treatment, a hypoallergenic diet with the exception of stone fruits, honey and carrots is prescribed to patients of the examined group. Hypoallergenic food was not prescribed to patients of the control group.
Patients in the control group were not given hypoallergenic food. On day 7, patients in the study group showed clinical improvement: breathing through the nose was restored, signs of conjunctivitis disappeared, and headaches did not bother them. On day 7, a rhinocytogram and total immunoglobulin E were taken. According to the results of tests, there was a decrease in the content of eosinophils in the nasal secretions to 3 in the field of vision, the level of total immunoglobulin E decreased to 30 IU/ml. Thus, a Hypo-allergenic diet with the exception of stone fruits, honey, carrots, and potatoes is a necessary part of the treatment of patients with pollinosis.

Keywords: diet, pollinosis, pollen, eosinophilia, rhinocytogram, sensitization

Introduction
Pollinosis is an urgent problem of modern therapy. Pollinosis is a pathological condition that occurs during the flowering period of plants and is characterized by the manifestation of signs of allergy [1, 2, 3]. The people the disease was called "hay fever." Recently, the frequency of cases of hay fever has increased, due to poor ecology, low immunity, malnutrition and lack of vitamins and minerals. In patients with pollinosis during the flowering period, the quality of life deteriorates sharply. Patients complain of nasal congestion, frequent sneezing, itchy eyes, swelling of the eyelids, lack of smell, disturbed sleep, headaches. This symptomatology accompanies the patient during the entire pollination of the plant for 2-3 months [4, 5]. In this period of the patient's life, symptomatic treatment and a diet with the exception of cross allergens should be prescribed. Compliance with a diet is a prerequisite for treatment and improving the quality of life of the patient.

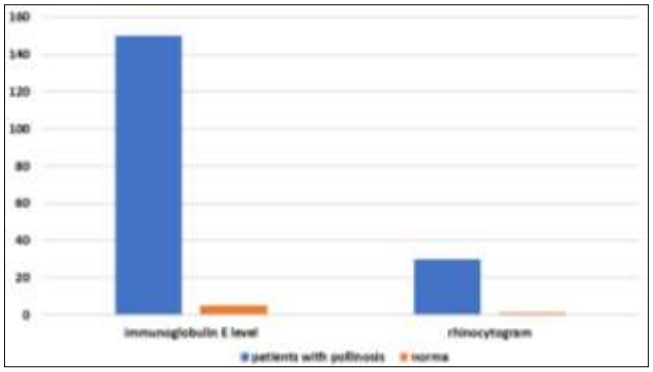
Aim
To study the effectiveness of the treatment of pollinosis with and without a hypoallergenic diet.

Materials and Methods
40 patients with manifestations of hay fever at the age of 20 to 40 years were examined. In all, hay fever symptoms were recorded in May and June; in all, sensitization to birch was detected. The study group was selected (20 patients with hay fever symptoms) who received symptomatic and pathogenetic treatment with the appointment of hypoallergenic nutrition. The control group (20 patients with symptoms of hay fever) received only symptomatic and pathogenetic treatment. In addition, laboratory examination (rhinocytogram, total immunoglobulin E level, allergotestration) was carried out for healthy people aged 20 to 40 years (n = 20 people). The investigation was approved and that informed consent was obtained.

Comparisons of mean values were performed by one-way analysis of variance using Student's T-test to assess the equality of the average Fisher F-test to assess the equality of variance. The relationship between the parameters was evaluated using linear and rank correlation coefficients.

Results

All patients (40 patients) with manifestations of hay fever Were examined: determination of total immunoglobulin E, allergotestration, rhinocytogram. In all patients (100%), sensitization to birch pollen was detected, the level of immunoglobulin E in all exceeded the normative values over 100 IU / ml (average 150 IU / ml). According to the rhinocytogram, the content of eosinophils in the nasal secretion exceeds 5 in the field of view (average 30 cells in the field of view).



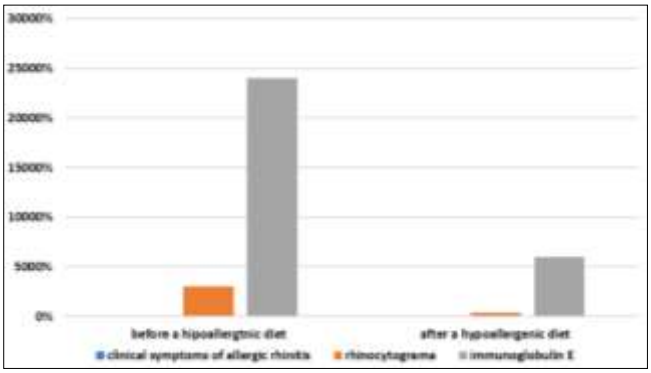
Picture 1

Data of laboratory parameters in patients with hay fever compared with those of healthy individuals.

Symptomatic and pathogenetic treatment was prescribed for all patients: inhaled glucocorticosteroids, nasonex 1 time per day, mast cell membrane stabilizer - single 10 mg, 1 tablet per day for the flowering period of birch.

Stone fruits (apples, pears, plums, apricots, peaches, cherries, cherries, etc.), honey and carrots have cross sensitization to birch allergens. Accordingly, in addition to treatment, a hypoallergenic diet with the exception of stone fruits, honey and carrots is prescribed to patients of the examined group. Hypoallergenic food was not prescribed to patients of the control group.

Clinical improvement was observed in patients of the examined group on day 7: breathing through the nose was restored, signs of conjunctivitis disappeared, and headaches did not bother. On day 7, a rhinocytogram was taken, total immunoglobulin E. According to the analysis results, a decrease in the content of eosinophils in the nasal secretion to 3 in the field of view was noted, the level of total immunoglobulin E decreased to 30 IU / ml.



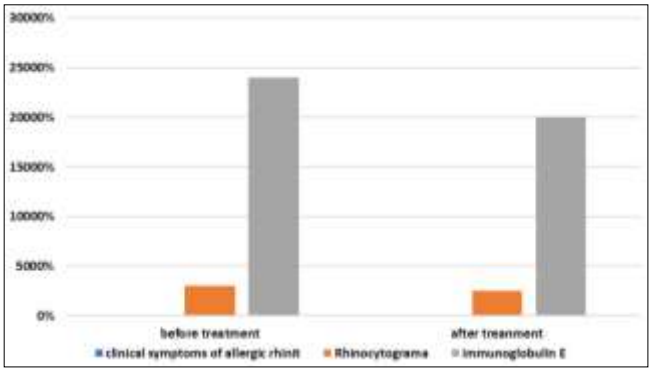
Picture 2

Comparison of the clinical efficacy of a hypoallergenic diet with prescribed treatment in patients with hay fever In patients with pollinosis in the control group, the appointment of symptomatic and etiotropic treatment gave an insignificant clinical effect on day 7: the number of nasal discharge in 50% of patients decreased, nasal congestion in 50%, itchy eyes in 50% of patients with hay fever. Fully clinical symptoms have not disappeared.

Laboratory parameters (rhinocytogram, determination of the level of immunoglobulin E in the peripheral blood) were taken from patients on day 7. The level of immunoglobulin E and the content in nasal secretion were not significantly changed.

Discussion

The pollination period of plants in patients with pollinosis is a threat to health and life. The available literature describes the clinical cases of anaphylactic reactions in patients with pollinosis in this period. Necessary medical and elimination measures in patients during pollination.



Picture 3

Comparison of the clinical effectiveness of the prescribed treatment in patients with hay fever

Conclusion

A hypoallergenic diet with the exception of stone fruits, honey and carrots, potatoes is a necessary part of the treatment of patients with pollinosis.

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